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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/064,881	08/27/2002	Yi-Chen Chang	9641-US-PA	6186

31561 7590 04/26/2004

JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE
7 FLOOR-1, NO. 100
ROOSEVELT ROAD, SECTION 2
TAIPEI, 100
TAIWAN

EXAMINER

EISEN, ALEXANDER

ART UNIT	PAPER NUMBER
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2674

DATE MAILED: 04/26/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/064,881

Applicant(s)

CHANG, YI-CHEN

Examiner

Alexander Eisen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 August 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
2. The disclosure is objected to because of the following informalities: paragraph [0034] states "second clock CLK2 is double of the first clock CLK1. The frequencies of the first and second clock CLK1 and CLK2 are the same". The clocks are either the same or one of them is double of the other.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.
4. Claim 19 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Claim 19 recites the limitation "the common clock". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

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international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-4 and 6-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Sato et al., ("Sato"), US 2002/0140645 A1.

With respect to claim 1 Sato discloses a driving method for a light-emitting device for use in an active matrix display comprising a driver circuit (data driving circuit DDR - see FIG. 1) to control the light-emitting device, the data driver circuit comprising a data input terminal (PAD1) for inputting a data signal so as to control a status of a light-emitting device; providing a clock and partitioning the clock into first clock and a second clock (see CLK+ and CLK- in FIG. 4), wherein the first and the second clock have the same frequencies but are asynchronous to each other; inputting the data signal to the data inputting terminal at the first clock; and inputting the reset signal to the data terminal of the driver circuit at the second clock (see FIGS. 3, 4; paragraphs [0086-0099]).

As to claim 2, the light-emitting device includes an organic light-emitting diode ([0079]).

As to claims 3 and 4, as can be seen from FIG. 4 the frequencies of the first and the second clocks are the same, and amount to 60 Hz (paragraph [0009]).

As to claim 6, the light-emitting device includes an organic light-emitting display to construct a thin-film transistor active matrix organic light-emitting diode display.

As to claims 7 and 8, see paragraphs [0089], [0092-96] and [0101-0102]).

As to claim 9, as can be seen from FIG. 4, reset signal includes a negative signal.

As to claim 10, the reset signal enables the capacitor CPR to discharge, wherein the capacitor is used to maintain a voltage for switching a driving device (TFT2) of the driver circuit (see abstract; .

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As to claim 11, see paragraphs [0034-0035] and [0083].

As to claim 12, Sato discloses a driving method for a light-emitting device including a video control unit for continuously receiving video signal with a frame as a unit (paragraph [0009]), the frame being inputted with an image display clock, the driving method comprises fixing a reset clock R (FIG. 4) after the clock control unit outputs the image signal and before the frame is changed (before the next signal ST in FIG. 4), a reset signal corresponding to the frame is output to the active matrix light-emitting display to temporarily switch off a plurality of pixel units corresponding to the frame.

As to claim 13, as can be seen from FIG. 4, the reset clock and the image display clock are spaced by approximately (synchronism is not essential for practicing the invention, see paragraph [0031] of the disclosure) half a clock of the image display clock (see also paragraph [0094]).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 5 and 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato.

With respect to claim 16 Sato discloses a driving method for a light-emitting device for use in an active matrix display comprising a driver circuit (data driving circuit DDR - see FIG. 1) to control the light-emitting device, the data driver circuit comprising a data input terminal (PAD1) for inputting a data signal so as to control a status of a light-emitting device; providing a

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clock and partitioning the clock into first clock and a second clock (see CLK+ and CLK- in FIG. 4), wherein the first and the second clock have the same frequencies but are asynchronous to each other; inputting the data signal to the data inputting terminal at the first clock; and inputting the reset signal to the data terminal of the driver circuit at the second clock.

Sato teaches color display (paragraphs [0071] and [0084]) but does not disclose that a color decoding unit for extracting an image signal from the video signal and a buffer memory unit for temporarily storing an image data obtained by decoding and processing of the image signal. Color decoding and extracting an image signal from video signal and frame buffers for storing image data are notoriously known to those of ordinary skills in the art, they are inherently present in modern display systems, and it would have been obvious to one of ordinary skills in the art at the time when the invention was made to use them.

As to claims 5 and 19, Sato teaches (paragraph [0009]) that field clocks are double of the frame clocks (field period is set to half of one frame period), and even though Sato does not specifically teach that the clock is double of the first clock (image display clock), there is no criticality of this feature for practicing the invention is shown, and therefore it would be obvious to those skilled in the art that the clock can be simply chosen as a matter of design consideration.

As to claims 14, 15 and 18, it is well known in the art to use a common clock, whereby all other necessary synchronizing signals and clocks are derived from that common clock. Therefore, it would not be a burden to one of ordinary skill in the art at the time when the invention was made to provide clocks as in FIG. 4 of Sato using common clocks derived by partitioning the latter. It should also be noted that there is no criticality of this feature for

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practicing the invention is shown, and therefore it would be obvious to those skilled in the art at the time of the invention that the clock structure can be in simply chosen as a matter of design consideration as far as it satisfies the display and reset requirements.

As to claim 17, as can be seen from FIG. 4, the reset clock and the image display clock are spaced approximately (synchronism is not essential for practicing the invention, see paragraph [0031] of the disclosure) by half a clock of the image display clock (see also paragraph [0094]).

As to claim 20, it is well known in the art that most of the circuitry is realized (packaged into) using chips.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Takahashi, US 5,717,417.

Saito et al., US 6,366,026 B1.

Kanayama, US 4,897,639.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Eisen whose telephone number is (703) 306-2988. The examiner can normally be reached on M-F (9:00 a.m. - 4:00 p.m.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard A. Hjerpe can be reached on (703) 305-4709.

Any response to this action should be **mailed to:**

Commissioner of Patents and Trademarks

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Washington, D.C. 20231

or **faxed to:**

(703) 872-9314 (for Technology Center 2600 only).

Hand-delivered responses should be **brought to:** Crystal Park Two, 2121 Crystal Drive,
Arlington, Virginia, Sixth Floor Receptionist.

Any inquiry of a general nature or relating to the status of this application or proceeding
should be **directed to:** Technology Center 2600 Customer Service Office, whose telephone
number is **(703) 306-0377**.

A handwritten signature in black ink, appearing to read "Alexander Eisen".

Alexander Eisen
April 20, 2004